



Elastilon®

Elastilon Strong Self Adhesive Installation system For Bamboo Flooring

Elastilon Model#: Elastilonstrong10m (EST310) / EST325

Home Depot

Use with Horizontal, Vertical and Strand Woven Bamboo floors

Works with all T&G and Click Lock systems

Replaces direct glue, nail, staple or edge-glue floating installations

Installs over any surface including directly over concrete

Strengthens click bamboo floor installations while reducing potential gapping and board displacement.

Check elastilonUSA.com for a copy of our most recent installation instructions before you begin your installation

Preparation

Please carefully review the instructions for both Elastilon and your Home Depot Bamboo flooring before starting your project. Be sure to inspect all flooring thoroughly before installation to ensure that there are no visible defects. It is the responsibility of the owner / installer to ensure that the material, the environmental and the sub-floor conditions are acceptable before the installation commences. **Elastilon is designed to be a free floating installation system, so do not permanently affix or attach to the subfloor or install under permanent cabinetry.**

Acclimation

Acclimation is the process of adjusting (conditioning) the moisture content of bamboo flooring to the environment in which it is expected to be installed. The bamboo flooring is fully acclimated when its moisture content and dimensions (width and length) are stable. For example, the averaged dimensions and moisture content remain constant for 3 consecutive days. Bamboo flooring must acclimate for as long as necessary to reach fully acclimated stage. Acclimation time varies depending on geographical area, interior climate control and time of the year. With open carton and open plastic wrap minimum acclimation time is 72 hours. In open box, open plastic wrap. Elevate planks from the floor by placing them on 2"X 2" lumber or equivalence. Place spacers (3/4" to 1" sticks) between each layer or cross stack the layers for maximum exposure to ambient conditions. Acclimation temperature range is 60°F-80°F and relative humidity (RH) of 40%-60%. Conditions in which the floor was acclimated should be maintained continuously thereafter. It is recommended to document as much acclimation information as possible. (date, pre and post install relative humidity, temperature, subfloor type, subfloor moisture content, pre and post install bamboo moisture content, acclimation period, pre and post install width and length of boards) For complete details on wood floors and the environment, please refer to the NWFA publication No. A100 - Water and Wood.

Jobsite preparation is necessary for a proper installation. Be sure to follow the minimum jobsite recommendations listed in your Bamboo flooring instructions.

Job Site Condition

Prior to installation, the installer must ensure that at the time of installation, the job site conditions including subfloor/substrate, ambient temperature and relative humidity, and all impacting variables will not negatively affect floor. The manufacturer will decline responsibility for damages associated with improper installation or poor site conditions.

Storage and Conditions

Do not store flooring in uncontrolled environmental conditions. For example, garages and exterior patios are not acceptable areas to store flooring. Handle and unload bamboo flooring with care and store within the environmentally controlled site in which it is expected to perform. Flooring stored on concrete slab should be elevated at least four inches to allow air circulation under cartons.

Existing Home

Existing home should have a consistent room temperature of 60°F-80°F and relative humidity of 40%-60%. Continual deviation from these conditions will affect the dimensions of flooring, especially bamboo. During heating season, humidity may be much lower than the acceptable range. Care must be taken with wood stoves and electric heat which tend to create very dry conditions. During the heating season, a humidifier is recommended to prevent excess shrinkage in bamboo flooring due to low humidity levels. During the non-heating season, humidity levels can be maintained by using an air conditioner, dehumidifier, or by turning on your heating system periodically.

New Construction or Remodel

All work involving water, such as pouring basement concrete floors, drywall and plasterwork, plumbing, etc. must be completed well in advance of the floor delivery. Ensure that the building is enclosed. Where building codes allow, permanent

heating and/or air conditioning systems should be operating at least five days preceding installation to promote proper acclimation and should be maintained during and after installation. If it is not possible for the permanent heating and/or air conditioning system to be operating before, during and after installation, a temporary heating and/or dehumidification system that simulate normal living (occupied) conditions can enable the installation to proceed until the permanent heating and/or air conditioning system is fully operational.

Your job site should have a consistent temperature of 60°F-80°F and relative humidity of 40%-60% which should be maintained continuously thereafter.

Basements and Crawl Spaces

Concrete slab or ground must be dry. The ground in the crawl spaces must be completely covered using 6 mil black polyethylene. Crawl space clearance between the earth and underside of joists should be no less than 18 inches and the perimeter vent area should be equal to 1.5% of the total square footage of the crawl space or as mandated by code.

Subfloor Preparation

All sub-floors must be prepared for installation in accordance with normal subfloor preparation procedures and accepted tolerances within the wood flooring industry. Check the sub-floor to see if it specifically meets the following requirements:

Dry - Concrete slabs must be at least 60 days old and the moisture content cannot exceed 3lbs./1000 sf under a Calcium Chloride test. The moisture content of the concrete floor must not exceed 3.9% with use of a Tramax Concrete Moisture Encounter Meter. Also the RH levels in the Concrete using in-situ Probes (ASTM F207-02) should not exceed 75%. If the moisture level of the concrete subfloor cannot be determined or if levels exceed the desired parameters then the use of a 6 mil polyethylene film vapor barrier (perm rating of .13 or less) is mandatory. Wood sub-floors must not exceed 13% moisture content and the moisture content difference between the sub-floor and the flooring material must not exceed 4%.

Flat - Floor must be even with a maximum tolerance between 1/8" over 6 ft or 3/16" in a 10 ft radius. (2mm per 2.5 meters)

Clean and structurally sound - Free of debris and any other loose material. Wood sub-floors must be stable and securely fastened to supporting joists. Be sure to nail or screw any areas that are loose or squeak. Sand, scrap, or grind any raised edges and level all low spots with the appropriate leveling compound (Concrete floors included) so that maximum tolerances are met.

Radiant Heat – Use of an approved wood flooring water or electrical radiant sub floor heating system is approved when installed either within or above the concrete / wood sub-floor. The heating system should be run 3 to 4 days prior to the installation at a reduced temperature of 64F (18c). Two days after the installation is complete, the temperature of the system may be raised gradually over a one week period to its desired operating temperature. Please note that the surface temperature of flooring should never exceed 81F (27C). Adding humidification may be necessary to maintain humidity levels at required levels. Always follow the flooring manufacturers' recommendations when it comes to radiant heat.

Installation

Elastilon can be used over any structurally sound sub-floor or just about any existing flooring material. Lay it right over any wood, concrete, vinyl tile or sheet, ceramic, or any other FLAT stable material. Do not install over any type of carpeting.

Begin by deciding the best layout of the floor for the room. It is best to start along the longest wall in the room. Remember that this is a free floating floor and an expansion space at least 5/8" (16 mm) must be maintained around all walls and stationary objects. In many cases it may be possible to undercut the Sheetrock (drywall) to allow for additional expansion room.

Expansion joints will also need to be installed in doorways, long hallways, and larger areas more than 33 ft (10m) in length following the direction of the small width (eg. 3 1/2" width) of the floor boards. Additional Expansion joints are not necessary in the direction of the long length of the floor boards (and expanses longer than 33 ft (10m) are permitted because a small amount of white carpenters glue (PVA) needs to be applied to all adjoining ends joints. (small ends of boards only)

Where necessary cut the door casings to allow the bamboo to slide underneath. Baseboards should never be fastened directly to the floor itself and may need to be raised to allow the flooring to slide underneath. If not raised, a small molding can be added to conceal the expansion gap after the installation is complete.

Measure the room to determine the number of rows of flooring needed. If the last row is narrower than 1 1/2" (4 cm) in width then reduce the starting board accordingly. When installing the flooring please be sure to follow the manufacturer's recommendations for board placement.

Over all concrete applications especially below grade, always install an approved 6 mil polyethylene film vapor barrier before laying the Elastilon. For concrete floors that are on-grade or above-grade, if the moisture parameters are higher than the required levels or the moisture levels cannot be determined, a 6-mil polyethylene film vapor barrier must be installed. All joints of the vapor barrier need to be overlapped by at least 8" (20cm) and sealed with a moisture resistant tape. Allow the vapor barrier to run up the walls 3-4" (8-9cm). The excess can be trimmed once the installation is complete.

Roll out the Elastilon (white protective film / smooth side up) perpendicular (at right angle) to the direction of the flooring. The rolls should be tight side by side with no overlap. Be sure to cover the entire work area with Elastilon. Do not tape the long edge of the Elastilon rolls together. They must be free to move. The short end (3ft / 1m side) of the Elastilon roll can be taped together to maintain alignment.

There are several methods of starting your installation.

Starter strip method: The first method involves creating a folded over flap of protective film. When you roll out the Elastilon you will need to add a little extra product (2 1/2 x width of boards) running up the wall where you're going to start your project. Peel back the white vinyl protective film the width of 2

$\frac{1}{2}$ planks and cut off the Elastilon material below it (leaving the white protective film folded over). This protective film is the starter strip which now should be positioned up against the wall where you intend to start laying the floor. (see illustrations below) The extra Elastilon that was cut off can be used at a later point in the installation or on a future installation. Simply place a leftover piece of the white protective foil over the exposed adhesive until it is ready to be used.

Direct placement method: The second method creates the starter flap as you start installing the first two rows. Cover the entire floor with Elastilon (wall to wall). Along the starting wall peel back the protective film (approximately $2 \frac{1}{2}$ times the width of your first board) to expose the adhesive layer of Elastilon. Set your first row of boards across the full length of the starting wall. Do not apply downward pressure on the boards until you are certain that this row is straight and true. As long as you do not put pressure on the boards they can be readjusted. Once you are sure that the row is straight and you have maintained the necessary expansion gap, you can press down on this row.

Return the protective film to within $\frac{1}{2}$ " (12mm) from the end of this first installed row of flooring and begin placing your second row of bamboo over the developing flap of protective film. This new larger starter strip can be used to continue the installation.

Protective film method : This method uses any protective film that may be available. Use the white vinyl protective film that was removed from the installation. With the Elastilon rolled out, peel and fold back the white vinyl protective film the width of $2 \frac{1}{2}$ planks along the wall you will be starting at. (Do not cut the Elastilon or the film) The adhesive layer will be exposed. Fold a piece of the extra white vinyl protective film in half and place it onto the exposed adhesive layer with the crease facing the starting wall. Be sure that this temporary folded strip extends well onto the original peeled back section. This temporary fold is now the starter strip where you will begin to build your floor.

Installing your Bamboo flooring has never been easier!

Remember, the flooring needs to be perpendicular (at right angles) to the rolled out Elastilon with the tongue edge facing out from the wall. (Boards can be installed in either direction if desired)

Place an expansion spacer of at least $5/8$ " (16 mm) at the start of the row and remember to maintain this gap on all other stationary walls and objects

With the white protective film starter strip now folded back over the Elastilon, begin assembling the next rows of flooring over this folded strip from side wall to side wall. The end joints should be staggered by the wood manufacturers' recommendations and/or industry recommendations. **A small amount of white carpenters glue (PVA) needs to be applied to all adjoining ends joints (small butt joint). Be sure to clean any glue residue before it dries.**

Ensure that the floor boards are fitted together tightly and straight. When the row is in position, apply forward pressure

to the boards so that the joint between the rows remain seamless, and then simply pull the white protective starter strip out from under the board to the edge of the flooring being careful not to expose the adhesive face. If this occurs, just tuck the protective foil back under the edge of the already installed floor board. Finally, apply pressure to the top of the flooring to secure it firmly to the Elastilon. Do not use mechanical fastening systems such as straps to force boards together. It is permissible to use blue painters tape to keep board alignment as you continue to build the floor on the release film.

It is recommended that you confirm with a chalk or laser line how straight your installed floor is. The floor can still be adjusted so that it is square to the room. To remove a board, simply tuck the protective film back under the board and pry it up slowly until it releases from the adhesive surface. You can now reinstall or replace the remove board.

Please note that it is possible to remove an installed floor board for only a brief period after it has been installed on Elastilon. Once the adhesive has set (approximately 20 minutes) the only means to remove a board is to cut out the piece in question and replace it by gluing the four sides of a new board back in place. Be sure to place a piece of Elastilon underneath the new board so as to ensure a level surface with the rest of the floor.

After the first few rows are installed cleanly, you can lay up multiple rows of flooring. Be sure to tap each board tightly together and to apply forward pressure as you pull the white protective film from under the flooring. Continue to press down on the installed floor as you lay the floor wall to wall. Remember, you can use the excess bamboo flooring material from the last end cut as the first board in the next row so as to minimize waste. Also, as you pull off the protective film, it can be rolled up or folded for future use.

To fasten a sliding door to the floor, mark the location of the screw holes that are on the bottom rail and drill a hole that is $5/8$ " (16mm) wide. The bottom rail can then be fastened to the sub-floor below. The rail width should cover the drilled holes.

Once the floor has been completely installed, remove the expansion spacers and trim any excess poly to the floor level. To cover the expansion gaps, install / reinstall all baseboards and add appropriate moldings as needed.

If installing unfinished flooring, it can be sanded immediately after installation. If it is a pre finished floor, furniture can be put back as well. It is recommended to put weight on the floor (as easy as walking over it), to help the floor adhere to the Elastilon evenly

Clean the floor with the appropriate cleaner and attach felt protection pads to the legs of the furniture. Always follow the flooring manufacturer's maintenance guidelines for proper care of your floors.

Special Notes:

The Elastilon Strong self adhesive installation system has been engineered to work with many species of wood flooring. It is important that the manufacturers / industry recommendations are followed before, during and after the installation with adherence to both room conditions and site preparation. The Elastilon instructions must be closely followed as well.

Long Length boards- Remember as you build the floor on the protective release strip, you will have the choice to change or move boards so that the fit is to your liking. Elastilon can be used with long length (8 feet/ 2.44m) as well as short length (12 inch/.30m) boards. Be sure to follow the manufacturers' recommendations in terms of mixing floor boards to optimize the look and strength of the floor. Once you are satisfied with the presentation of the floor remove the protective release strip and move on to the next section.

Flooring that isn't perfect - It is also important to visually inspect each piece of flooring before being installed. As with any other type of installation method, Elastilon cannot compensate for flooring that is severely bowed warped, cupped or damaged prior to an installation. However, most boards may be used if the defective section is cut and removed with the remainder of the board used as a start or end piece, used in a closet or in a low traffic or used in a concealed portion of the room. Please note that the use of mechanical fastening systems such as straps should never be used to force boards together. Pressure from a rubber mallet and the use of blue painters tape to keep boards tight is permissible. (Remember never to strike the upper surface of the flooring as this could lead to surface defects) During the racking (building) of the floor on top of the Elastilon protective release strip, flooring that is not severely bowed can be installed as long as it can still be inserted into the T&G of the boards surrounding it. This will pull the board straight and allow full contact on the Elastilon membrane. Be sure to place a small amount of carpenters glue on all four sides of the affected board for a concern free installation.

Floor Noise – Deflection may cause a minimal amount of friction or “floor Noise”. Note that normal floor noise will vary from one installation type to the next depending on the sub-floor type, sub-floor deflection, species, milling and type of flooring material, relative humidity and the amount of topside pressure applied to the flooring material. For these reasons, “floor Noise” is not considered a defect.

Working with thinner boards – Although these instructions are common to the installation of Elastilon with all hardwood and bamboo floors, particular attention must be given to the following when installing thinner boards. (ie, $\frac{1}{2}$ "/12.5mm, $\frac{3}{8}$ "/10mm and $\frac{5}{16}$ "/8mm)

- All end joints must be glued throughout the installation.
- The floor must be flat to within .08 inch over 8 ft (2mm over 2.5m). Uneven floors can lead to increased floor deflection with narrower and/or thinner floor board installations.

Helpful Tips:

- Elastilon is designed as a floating installation system. Do not permanently fix or attach product to the subflooring or install under permanent cabinetry.
- Maintain the proper expansion around room perimeter and around “fixed” cabinetry.
- Expansion joints will need to be installed in doorways, long hallways, and larger areas more than 33 ft (10m) following the direction of the width of the floor boards. Additional expansion joints are not necessary in the direction of the long length of the floor boards (expanses longer than 33 ft (10m) are permitted). Glue all end joints.
- **Elastilon alone is not a moisture barrier and will require a separate moisture barrier such as 6mil sheet plastic to be placed over cement, ceramic tiles or similar.**
- Where necessary, undercut door jams or casings to allow the flooring to float freely and to expand and contract.
- To promote best board bonding into the adhesive top layer, remove any trace of dust from the back of the boards after making cuts.
- Be selective with board choice and do not install miss-milled boards, imperfect boards, cupped, twisted or bowed boards.

CHECK THE SUBFLOOR

- Subfloor flatness is very important. Subfloor deviation must not exceed $1/8$ " in a 6' radius or $3/16$ " in 10'. ($1/8$ " is equal to a grain of rice), ($3/16$ " = three stacked quarters).
- All floors must be stable and clean as well as dry to NWFA/Flooring manufacturers' specifications. For complete details please refer to the Installation Guidelines and Methods published by the National Wood Flooring Association (NWFA). Additional application information is available at www.NWFA.org

ACCLIMATION/CONDITIONING OF THE FLOORING

- All wood products are affected by environmental conditions/fluctuations especially prefinished materials. Therefore acclimate the new flooring in the areas to be installed to normal lived-in conditions while in the boxes.
- If products are protected in plastic or to speed up acclimation, open the ends of the boxes. To prevent board warping, twisting or bowing, do not cut the outside plastic support packaged bindings until ready to install.
- Length of acclimation time is not the determining factor. The goal is to reach an indoor equilibrium or balance between the “core” of the new flooring with its surroundings before assembly or installation. This balance could be achieved in as little as 1 to 5 days, or longer for some exotic species

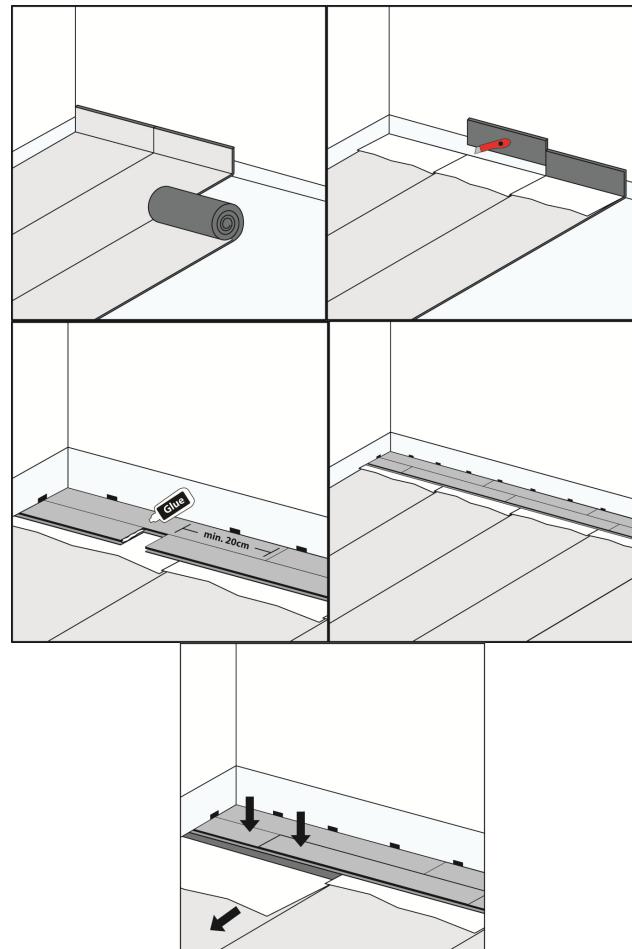
- For best performance, condition the flooring to consistent indoor temperatures of 60°-80° F and indoor humidity levels of 40% - 60%. The use of a dehumidifier or a humidifier depending on the local jobsite situation may be necessary to maintain the desired results.

ENVIRONMENTAL CONSIDERATIONS FOR THE JOBSITE

- Permanent air conditioning and heating systems need to be operational at all times. Care must be taken with wood stoves and electric heat which tend to create very dry conditions.
- Very dry or humid regions of the country usually require extended conditioning to balance the wood to its environment.
- The use of dehumidifier or humidifier depending on the situation may be necessary to maintain desired results.
- Note that recommended acclimation levels maintained even after the installation will help to minimize board movement, excessive squeaks and gaps.
- Proper jobsite conditions, acclimation and moisture testing the subfloor and new flooring all work together for the success of the installation, and is the responsibility of those overseeing the project.
- Not following the above recommendations can negatively impact board performance and can result in excessive squeaks, board gapping, board-edge cupping and finish related issues, especially so in seasonal or vacation homes without constant indoor climate regulated conditions.

DURING ASSEMBLY

- Ensure that walls are reasonably straight; make necessary adjustments to the starter row.
- Elastilon must be rolled out perpendicular (90 degrees) to the direction of the floor to be installed.
- Install Elastilon with the white plastic film side up.
- Do not overlap or tape the seams.
- Plastic film protects the adhesive from dust and contaminates, do not remove until ready to use.
- Only pull out enough plastic film to adhere the desired amount of boards.
- If film was pulled out too far, tuck film back under the last row or board to protect the adhesive.
- Start straight, end straight. Select the longest, straightest boards for the starting rows.
- Hold planks together using blue painter's tape to maintain tightness when pulling away film.
- To minimize board-end gapping always apply carpenters wood glue to all board-end joints.
- Many installers have successfully used mechanical straps to snug boards tighter during assembly. However, beware of over-strapping. Note that mechanical straps should never be used to compensate for poor quality flooring by forcing together boards that are warped, bowed, cupped or twisted. Remove questionable boards before installation.



WARRANTIES.

A copy of the Warranty may be obtained by contacting the ElastilonUSA Office. Info@elastilonusa.com

For any questions on the Elastilon Self Adhesive Installation System, please contact your local dealer or ElastilonUSA directly at 1-877-526-9663

Visit us at: www.elastilonusa.com

